



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G06K 19/07, B42D 15/02	A1	(11) International Publication Number: WO 00/43949 (43) International Publication Date: 27 July 2000 (27.07.00)
(21) International Application Number: PCT/US99/29760 (22) International Filing Date: 15 December 1999 (15.12.99) (30) Priority Data: 09/236,072 25 January 1999 (25.01.99) US (71) Applicant: SONY ELECTRONICS, INC. [US/US]; 1 Sony Drive, Park Ridge, NJ 07656 (US). (72) Inventors: TOTSUKA, Keiichi; 43 Mariners Cove, Edgewater, NJ 07020 (US). GIOSCIA, Richard; 38 Winding Trail, Mahwah, NJ 07430 (US). SONODA, Yumi; 1022 Soth Springer Road, Los Altos, CA 94024 (US). ZOELS, Jan-Christoph; 33 Flatbush Avenue, Brooklyn, NY 11217 (US). UDAGAWA, Masamichi; 43 West 16th Street #10D, New York, NY 10011 (US). MOESLINGER, Sigi; 43 West 16th Street #10D, New York, NY 10011 (US). (74) Agent: NICHOLS, Steven, L.; Rader, Fishman & Grauer PLLC, Lion Building, Suite 501, 1233 20th Street, N.W., Washington, DC 20036 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: METHOD AND APPARATUS FOR PROMOTING MUSIC SALES AND PROVIDING AUDIO CONTENT WITH PRINTED ADVERTISING		
(57) Abstract <p>A card or sheet of printed information contains an electronic memory device (106) or a coded section that can be read by a reader unit (101 or 201). The reader unit outputs an audio file from the memory device (106) or coded section to supplement the printed information. The memory device or coded section may also be linked to an internet site at which more complete or multi-media files are available.</p> <div data-bbox="1079 1176 1453 1963" data-label="Diagram"> </div>		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

TITLE OF THE INVENTION

**Method and Apparatus for Promoting Music Sales and
Providing Audio Content with Printed Advertising**

FIELD OF THE INVENTION

5 The present invention relates to the field of
advertising. More specifically, the present invention
relates to the fields of music promotion and providing audio
content with printed advertisements.

BACKGROUND OF THE INVENTION

10 In the modern world, the majority of advertising is
accomplished through television, radio or print. The print
medium for advertising includes newspapers, magazines,
flyers, mailers, circulars, etc. Television advertising
provides both video and audio information to potential
15 customers, but is by far the most expensive form of
advertising. Radio is less expensive, but provides only
audio.

 The various forms of printed advertising can provide
both text and pictures. Moreover, printed advertising is
20 inexpensive. Unfortunately, printed advertising is often
easily ignored and does not spark the interest of potential
customers. Therefore, there is a need in the art for a
device and method of increasing reader interest in printed
advertising. There is a further need in the art to add an
25 audio component to printed advertising.

 These general needs in the advertising industry are
echoed in the field of music promotion. Often a potential
buyer of a music recording has heard one or two selections
from an artist's album over the radio. However, the
30 potential buyer may be reluctant to purchase the artist's
work for fear that the unheard pieces on the album will not
satisfy the buyer's tastes.

 Alternatively, a potential purchaser may desire to buy
some new music, but not have any particular purchase in

mind. To make a sale to such a purchaser, a music seller must provide an opportunity for the purchaser to become acquainted with music that that purchaser will appreciate.

5 To address these problems, sellers of music recordings frequently play music in their stores so that potential purchasers can hear more of a particular album or become acquainted with new musical works. However, only one such album can be previewed for customers in this manner at one
10 time. Therefore, music stores often provide listening stations with headphones and a user interface. Through such a listening station, a potential purchaser may choose to listen to particular albums or samples of new music.

The drawback with these existing methods is the need to
15 draw the potential customer into the music store or other location where music can be previewed. It would obviously be more advantageous if music could be previewed for potential customers at that customer's convenience without that customer be required to come into the store. Thus,
20 there is a need in the music promotion field for a device and method of previewing music for potential customers that can be used at any time and location convenient for the potential customer.

SUMMARY OF THE INVENTION

25 It is an object of the present invention to meet the above-described needs and others. Specifically, it is an object of the present invention to provide a means and method of supplementing printed advertising material with audio.

30 Additional objects, advantages and novel features of the invention will be set forth in the description which follows or may be learned by those skilled in the art through reading these materials or practicing the invention.

The objects and advantages of the invention may be achieved through the means recited in the attached claims.

To achieve these stated and other objects, the present invention may be embodied and described as a device for
5 providing audio or supplemental content with printed advertising. The device includes a substrat such as a card or sheet in combination with a memory device. An audio file is stored in the memory device.

If the card or sheet is a card comprising an electronic
10 memory unit as the memory device, a reader unit is used for receiving the card and making an electrical connection to the memory unit so as to access the audio file. Alternatively, if the card or sheet is a sheet comprising a coded memory strip as the memory device. A different reader
15 unit is used through which the memory strip is slid. Whereupon, the reader unit reads the coded memory strip so as to access the audio file.

In either case, the reader unit preferably includes an audio output device for making the audio file audible to a
20 listener. This may be a speaker provided on the reader unit or a jack or connection to external speakers, for example, a pair of headphones.

The present invention also encompasses a device for providing electronic content with printed advertising. This
25 device includes a card or sheet in combination with a memory device, where an internet address is stored in the memory device. As before, the memory unit may be an electronic device to which a reader is electrically connected, or the memory unit may be a coded strip which is passed through a
30 reader to access the data stored in the strip.

In either case, the reader unit comprises a transmitter for transmitting the retrieved internet address to a terminal from which the internet site of the address is accessible. The transmitter may be wireless or wire-line.

The present invention also encompasses the methods inherent in using the devices described above. For example, the present invention encompasses a method for providing audio content with printed advertising by storing an audio
5 file in a memory device of a card or sheet; and a method for providing additional content with printed advertising by recording an internet address in an electronically readable memory device on a card or sheet.

BRIEF DESCRIPTION OF THE DRAWINGS

10 The accompanying drawings illustrate the present invention and are a part of the specification. Together with the following description, the drawings demonstrate and explain the principles of the present invention.

Fig. 1 is an illustration of a first embodiment of the
15 present invention.

Fig. 2 is an illustration of a second embodiment of the present invention.

Fig. 3 is an illustration of an expanded system according to the principles of the present invention that
20 incorporates the device shown in either Fig. 1 or Fig. 2.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Using the drawings, the preferred embodiments of the present invention will now be explained.

A first embodiment of the present invention is shown in
25 Fig. 1. As illustrated, a card (105) which incorporates an electronic memory device (106) is provided. The card (105) may be made of any of a variety of equivalent materials, e.g., paper, plastic, cardboard, film, etc. The card (105) bears an electronic memory device (106) that may be, for
30 example, an IC memory chip or a memory module. Additionally, the card (105) may bear printed information including either text or pictures. The printed information on the card (105) may advertise a product or identify information stored in the memory device (106).

The present invention also includes a reader (101) for retrieve the information stored in the electronic memory device (106). The card (105) is inserted into the reader (101) as shown by the arrow in Fig. 1. A window (103) may
5 be provided to assist in accurately aligning the card (105) in the reader (101). If the window (103) is used, a graphic or icon may be printed on the card (105) so as to be visible through the window (103) when the card (105) is properly aligned and inserted in the reader (101)

10 When the card (105) is inserted into the reader (101), electrical connections are made between the reader (101) and the memory unit (106) on the card. The memory unit (106) contains an audio file. The reader (101) may automatically access the audio file in the memory unit (106) when the card
15 (105) is inserted. Alternatively, access of the memory unit (106) by the reader (101) may be controlled by a user interface such as a button (104).

The audio file in the memory unit (106) is then output by the reader (101). The reader (101) may incorporate a
20 speaker for playing the digital audio file. See Fig. 2. Alternatively, the reader (101) may include a jack (102) to which headphones may be connected for listening to the audio file.

The audio file recorded in the card's memory unit (106)
25 may be an advertising message, for example, a message tied to the printed information on the card (105). Alternatively, the audio file may be a music sample intended to persuade potential purchasers to buy a recording of the music. In this manner, music samples can be widely
30 distributed to encourage potential purchasers to buy recordings without requiring that the potential purchasers come to the music outlet.

Fig. 2 illustrates a second embodiment of the present invention. As shown in Fig. 2, the card (105) may be

replaced by a sheet (205) which is, again, made of any of a variety of equivalent materials, e.g. paper, plastic, cardstock, cardboard, film, etc.

5 The sheet (205) includes a code strip (204) which is preferably a magnetic strip. However, the strip (204) could alternatively be, for example, a bar code or other data storage device.

10 A reader (201), which functions similar to the reader (101) described above, is used to retrieve audio data from the strip (204). A slot (203) is provided in the reader (201) through which the strip (204) is slid as indicated by the arrow in Fig. 2. Audio data stored on the strip (204) is then read by the reader (201) and output for the user. As shown in Fig. 2, the reader (201) may include a speaker
15 (202) for playing the audio data of the strip (204). Alternatively, as described in connection with Fig. 1, the player (201) may include a jack to which headphones may be attached.

20 As will be understood by those skilled in the art, the amount of audio data stored on a strip (204) as illustrated in Fig. 2 is limited. Therefore, the audio data stored would preferably be of lower quality, not high-fidelity. Moreover the audio data would most likely be compressed. While this scheme will not allow for high quality music
25 samples to be distributed, a purchaser may be given a sufficient idea of the sound of the musical piece to be interested in buying or further investigating the work.

30 Any other audio advertising message may also be encoded in strip (204). With the sheet (205), a relatively large amount of printed information maybe given to supplement the audio data encoded in the strip (204).

Fig. 3 illustrates an expanded system according to the present invention that makes use of either of the readers (101 or 201) described above. As noted, the capacity of the

memory unit (106) and, especially, the strip (204) is limited. This problem can be overcome using the system of Fig. 3.

As shown in Fig. 3, a user terminal (301) communicates electronically (303) with the reader (101 or 201) of the present invention. The connection (303) between the terminal (301) and the reader (101 or 201) is preferably a wireless connection such as an infrared, radio frequency or ultrasonic link. However, the connection (303) may also be a wired connection. The necessary transmitter, receiver or connection ports would be provided respectively on the reader (101 or 201) and the terminal (301).

Under the principles of the embodiment of Fig. 3, the memory unit (106) or the strip (204) store an internet address at which a corresponding audio or multimedia file is located. The address is provided over the connection (303) to the terminal (301). The terminal (301) is provided with a connection (302) to the internet over which the addressed file can be accessed. The terminal (301) may include a speaker, a headphone port and/or a display device for outputting the addressed internet file to the user. In this way, the card (105) or the sheet (205) can be associated with an audio file of virtually any size or a web-site with video and audio data.

The preceding description has been presented only to illustrate and describe the invention. It is not intended to be exhaustive or to limit the invention to any precise form disclosed. Many modifications and variations are possible in light of the above teaching.

The preferred embodiment was chosen and described in order to best explain the principles of the invention and its practical application. The preceding description is intended to enable others skilled in the art to best utilize the invention in various embodiments and with various

modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the following claims.

WHAT IS CLAIMED IS:

1. A device for providing audio content with printed advertising comprising a card or sheet in combination with a memory device, wherein an audio file is stored in said memory device.

2. The device of claim 1, wherein said card or sheet is a card (105) comprising an electronic memory unit (106) as said memory device.

3. The device of claim 2, further comprising a reader unit (101) for receiving said card (105) and making an electrical connection to said memory unit so as to access said audio file.

4. The device of claim 1, wherein said card or sheet is a sheet (205) comprising a coded memory strip (204) as said memory device.

5. The device of claim 4, further comprising a reader unit (201) through which said memory strip (204) is slid whereupon said reader unit (201) reads said coded memory strip (204) so as to access said audio file.

6. The device of claim 1, further comprising a reader unit (101) for accessing said memory device to reproduce said audio file, said reader unit (101) comprising an audio output device (202) for making said audio file audible to a listener.

7. A device for providing electronic content with printed advertising comprising a card or sheet in combination with a memory device, wherein an internet address is stored in said memory device.

8. The device of claim 7, wherein said card or sheet is a card (105) comprising an electronic memory unit as said memory device, and further comprising a reader unit for receiving said card (105) and making an electrical

connection (303) to said memory unit (106) so as to access said internet address.

9. The device of claim 8, further comprising a transmitter on said reader unit (101) for transmitting said internet address to a terminal (301) from which said internet address can be accessed.

10. The device of claim 7, wherein said card or sheet is a sheet (205) comprising a memory strip (204) as said memory device, and further comprising a reader unit (201) through which said strip (204) is slid so that said reader unit (201) reads said internet address from said strip.

11. The device of claim 10, further comprising a transmitter on said reader unit (201) for transmitting said internet address to a terminal from which said internet address can be accessed.

12. A method for providing audio content with printed advertising comprising storing an audio file in a memory device of a card or sheet.

13. The method of claim 12, wherein said card or sheet is a card (105) comprising an electronic memory unit (106) as said memory device, said method comprising connecting a reader unit (101) to said electronic memory unit (106) so as to access said audio file.

14. The method of claim 12, wherein said card or sheet is a sheet (205) comprising a coded memory strip (204) as said memory device, said method comprising sliding said strip (204) through a port (203) of a reader unit whereupon said reader unit (201) reads said coded memory strip (204) so as to access said audio file.

15. The method of claim 12, further comprising transducing said audio file so as to be audible to a listener with a reader unit (201) for accessing said memory device, said reader unit (201) comprising an audio output device (202).

16. A device for providing additional content with printed advertising comprising recording an internet address in an electronically readable memory device on a card or sheet.

5 17. The method of claim 16, wherein said card or sheet is a card comprising an electronic memory unit (106) as said memory device, said method comprising:

 connecting a reader unit (101) to said electronic
memory unit (106) so as to access said internet address; and
10 transmitting said internet address to a terminal from
which said address can be accessed.

18. The method of claim 16, wherein said card or sheet is a sheet comprising a memory strip (204) as said memory device, said method comprising:

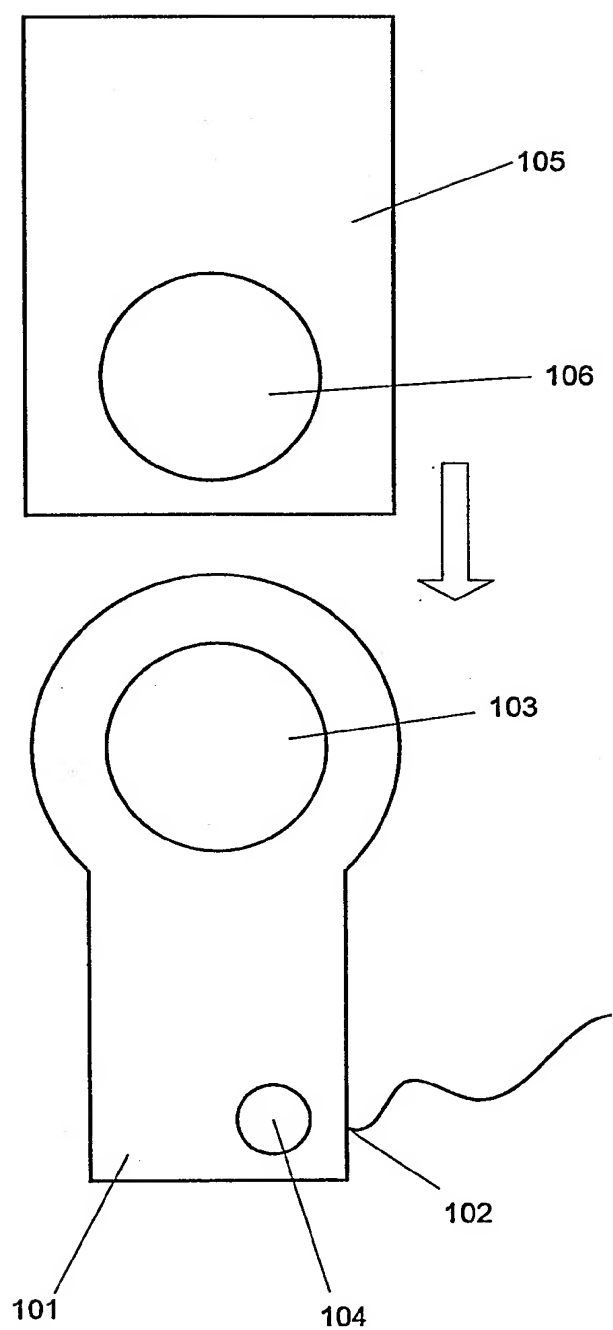
15 sliding said strip (204) across a reader unit (201) so
as to read said internet address; and

 transmitting said internet address to a terminal from
which said address can be accessed.

19. A device for providing audio content with printed
20 advertising comprising a substrate in combination with a
memory means for storing either an audio file or an internet
address.

20. The device of claim 19, wherein said memory means
comprises an electronic memory unit (106), and said device
25 further comprises a reader means (101) for connecting to and
reading data stored in said memory unit.

21. The device of claim 19, wherein said memory means
comprises a coded data strip (204), and said device further
comprises a reader means (201) for reading said coded data
30 strip (204) to retrieve said audio file or internet address.



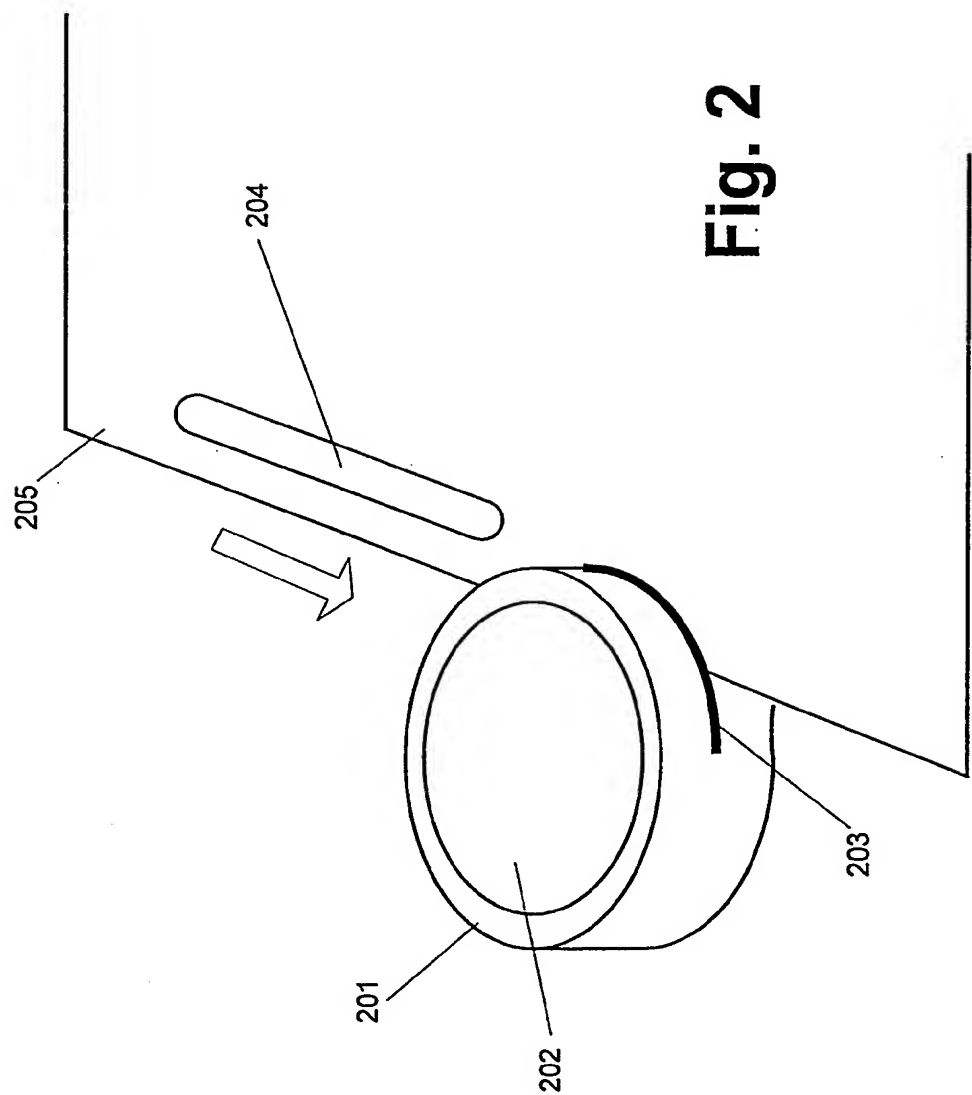


Fig. 2

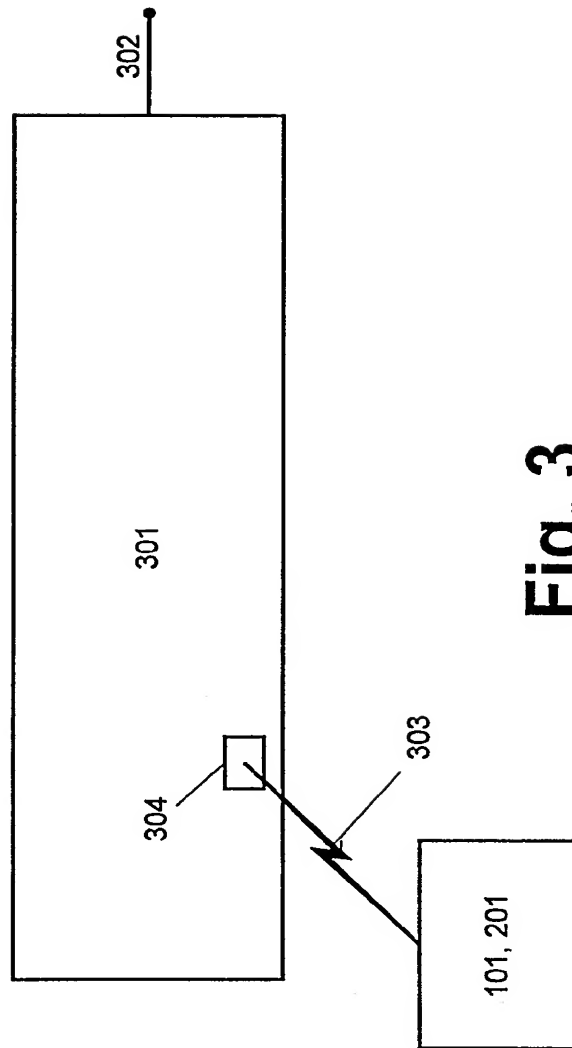


Fig. 3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/29760

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06K19/07 B42D15/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
IPC 7 G06K B42D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 5 275 285 A (CLEGG TIMOTHY P) 4 January 1994 (1994-01-04) abstract column 1, line 45 -column 3, line 35 figure 1 — -/-	1, 2, 12, 19 3-6, 13-15 21

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
"&" document member of the same patent family

Date of the actual completion of the international search

31 March 2000

Date of mailing of the international search report

06/04/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Jacobs, P

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/29760

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 5 493 105 A (DESAI NIMESH R) 20 February 1996 (1996-02-20) abstract column 1, line 5 -column 2, line 62 column 3, line 50 -column 6, line 20 column 7, line 47 -column 9, line 8 figures 1,1A,2A,2B	7,8,10, 16,19-21 3-6,9, 11, 13-15, 17,18 1,2,12
Y	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 13, 30 November 1998 (1998-11-30) & JP 10 222446 A (NIPPON TELEGR & TELEPH CORP & NTT;), 21 August 1998 (1998-08-21) abstract	9,17
Y	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 01, 29 January 1999 (1999-01-29) & JP 10 289183 A (AZUMA TOMOHIKO), 27 October 1998 (1998-10-27) abstract	11,18
X A	DE 297 09 648 U (OTTERSTEIN KARL) 11 December 1997 (1997-12-11) abstract page 2 -page 5	1,6,7, 12,15, 16,19,20 2,3,8,13
A	US 5 787 399 A (CHO CHAN-DONG ET AL) 28 July 1998 (1998-07-28) abstract column 1, line 10 -column 2, line 30 column 3, line 33 - line 51 figure 1	1-6, 12-15, 19,20

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/29760

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5275285 A	04-01-1994	NONE	
US 5493105 A	20-02-1996	NONE	
JP 10222446 A	21-08-1998	CN 1190301 A SG 65035 A US 5987612 A	12-08-1998 25-05-1999 16-11-1999
JP 10289183 A	27-10-1998	NONE	
DE 29709648 U	11-12-1997	NONE	
US 5787399 A	28-07-1998	KR 138333 B CN 1118101 A JP 7325600 A	15-05-1998 06-03-1996 12-12-1995